

REMARKS

Favorable reconsideration and allowance of the subject application are respectfully requested. Claims 1-22 are pending in the application, with claims 1, 21, and 22 being independent.

Allowable Subject Matter

Applicant notes with appreciation, the Examiner's indication on page 2 of the Office Action, that claim 22 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has amended claim 22 to include the subject matter of its base claim, namely claim 21. Therefore, claim 22 should now be considered allowed. For at least the reasons detailed below, Applicant respectfully submits that all pending claims are allowable.

Claim Rejections Under 35 U.S.C. §103

The Examiner maintained the rejection of claims 1-21 under 35 U.S.C. 103(a) as being unpatentable over *Reuss et al.* (US 5,579,318) in view of *Yazaki* (US 6,055,545). This rejection is respectfully traversed, insofar as it pertains to the presently pending claims.

As explicitly outlined in the Amendment submitted on August 27, 2002, *Reuss et al.* fails to teach or suggest a clock module for

keeping a time synchronized between the user terminal and the server, whereby each of the user terminals and the server have clock modules.

Applicant specifically pointed out that *Reuss et al.*, teaches away from this feature, and directed the Examiner's attention to col. 4, lines 42-45, of *Reuss et al.*, wherein it states that "...it is an additional object of the present invention to eliminate the necessity of ensuring that network elements are time-synchronized with each other in order for their databases properly to be maintained concurrent." MPEP §2145(X)(D)(1) specifically states that "[a] prior art reference that 'teaches away' from the claimed invention is a significant factor to be considered in determining obviousness." Because *Reuss et al.* teaches away from the present invention, e.g., eliminating the necessity of ensuring that network elements are time-synchronized with each other, *Reuss et al.* is not a proper reference for establishing *prima facie* obviousness.

The Examiner, however, maintains in the outstanding Office Action, that *Reuss et al.* teaches a time synchronized clock as *inherent* data in a header, and cites col. 8, lines 11-12 and lines 64-67, for support thereof. The Examiner further alleges, in the conclusionary statement, on pages 4-5 of the outstanding Office Action that:

Reuss's disclosure of time stamps at col. 4, lines 42-45 does not mean the references should be read in a vacuum, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art...[and that] Reuss's suggestions are not mutually exclusive and do not obfuscate the historical teachings that data updates depend on their time stamps and computers' clocks.

Applicant, however, still fails to see how *Reuss et al.* teaches a time-synchronized clock. As previously stated, *Reuss et al.* teaches at most, in col. 8, lines 11-12, that a message contains a header and a body, whereby the header includes elements needed to route the message to the destination, and the body contains synchronization data and that this "synchronous data" is "subscriber-changeable data, which is maintained concurrently in different applications and service control points," see col. 5, lines 35-37.

The Examiner's responses to Applicant's arguments border on piecemeal examination. Referring to MPEP §707(g), it states that "[a rejection] should be stated with the full development of reasons rather than by a mere conclusion coupled with some stereotyped expression."

Although Applicant recognizes that Examiners give claims their broadest reasonable interpretation in light of the supporting disclosure during prosecution (as specified, for example, in MPEP

\$2106), this guideline for examination does not permit disregarding words/limitations in the claims. In other words, "all words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP §2143.03, citing *In re Wilson*, 424 F.2d 1382, 1385, 165, USPQ 494, 496 (CCPA 1970). Furthermore, the broadest reasonable interpretation of a claim must be consistent with the interpretation that those skilled in the art would reach. MPEP §2111, citing *In re Cortright*, 165 F.3d 1353, 1359, 489 USPQ2d 1464, 1468 (Fed. Cir. 1999).

During patent examination, the pending claims must be interpreted consistent with the specification, see *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). The Examiner's attention is directed to page 20, lines 14-15 of the present application, which teach that "[t]he user clock module 201 adjusts its clock according to the clock of server clock module 402." In other words, "the plurality of user terminals and the server include clock modules for keeping a time synchronized between the user terminal and the server," as recited in the claims. Therefore, Applicant once again submits that *Reuss et al.* fails to teach or suggest at least this feature.

To establish a *prima facie* case of obviousness, three basic criteria must be met: (1) there must be some suggestion of

motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) **the prior art reference must teach or suggest all the claim limitations**, see *In re Vaeck*, 947 F.2d 48, 20 USPQ2d 1438 (Fed.Cir.1991).

The Examiner alleges, in rejecting claims 1-21 under 35 U.S.C. §103, that "Reuss teaches a time synchronized clock as **inherent data in the header**," (emphasis added) and that "Reuss's suggestions are not mutually exclusive and do not obfuscate the historical teachings that data updates depend on their time stamps and computers's clocks." Applicant respectfully submits that these conclusionary statement made by the Examiner are not a proper basis to substantiate an obviousness rejection.

Recent Federal Circuit case law precedent, discussed further below, makes it explicitly clear that the factual question of motivation is material to patentability and cannot be resolved on subjective belief and unknown authority, but must be read on the objective evidence of the record. Federal Circuit case law precedent further requires that "common sense and common knowledge" alone is improper evidence in support of an obviousness rejection.

The Examiner purports a common sense and common knowledge

reason for the deficiencies of *Reuss et al.*, in other words, stating that *Reuss et al.* would have suggested a similar technique. However, common sense and knowledge are not objective evidence of record, as the Federal Circuit explains, but are in fact commensurate with subjective belief and unknown authority. Therefore, the Examiner has failed to meet the legal requirements to substantiate the obviousness rejection.

For an illuminating discussion on the burden placed on an Examiner to establish objective factual findings of record, the Examiner is referred to the recent Federal Circuit decision of *In re Lee*, 61 USPQ2d 1430 (CAFC 2002).

In re Lee involved an appeal of a decision of the Board of Patent Appeals in which Lee argued that the Examiner failed to provide a source of a teaching, suggestion, or motivation to combine the applied prior art to arrive at the claimed invention. The Board responded to these arguments by ruling that "[t]he conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference." *Id.* at 1432. The Federal Circuit overturned the Board's decision "for failure to meet the adjudicative standards for review under the administrative procedure act." *Id.* at 1431. The Federal Circuit

further stated that "the factual inquiry whether to combine references must be thorough and searching...it must be based on objective evidence of record...[t]his precedent has been reinforced in a myriad of decisions and cannot be dispensed with." Id. at 1433. The Court also stated that the USPTO is "not free to refuse to follow Circuit precedent" and "cannot rely on conclusionary statements when dealing with particular combinations of prior art and specific claims." Id. at 1434.

In sum, because *Reuss et al.* does not teach or suggest at least all of the claim limitations, e.g., that the plurality of user terminals and the server include clock modules for keeping a time synchronized between the user terminal and the server, and because of the Examiner's conclusionary statement that *Reuss et al.* teaches a time synchronized clock as *inherent* data in a header, the Examiner's rejection must be withdrawn.

Furthermore, even assuming *in arguendo* that *Yazaki et al.* could be combined with *Reuss et al.*, which Applicant does not admit, *Yazaki et al.* would still fail to make up for the previously mentioned deficiencies of *Reuss et al.*

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections to claims 1-21, and further the claims to allowance.

Conclusion

In view of the above amendments and remarks, this application appears to be in condition for allowance and the Examiner is, therefore, requested to reexamine the application and pass the claims to issue.

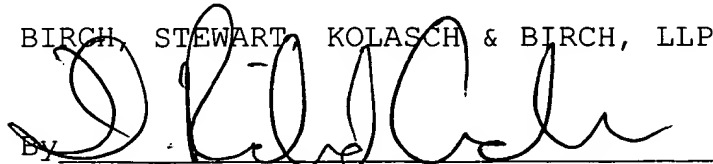
Attached hereto is a marked-up version of the changes made to the application by this Amendment.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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Attachment: Version With Markings To Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

The claims have been amended as follows:

13. (ONCE AMENDED) The data updating system according to claim 1, wherein the user terminal transmits an information transmission request to the server, and wherein the shared data control module includes a user notification unit for receiving the information transmission request from the user terminal, checking an access log, and responding to the [inforamtion] information transmission request if the user terminal has accessed the shared data before receiving the information transmission request.

22. (ONCE AMENDED) [The data updating method according to claim 21,] A data updating method for a computer systems having a plurality of user terminals, and a server for controlling the shared data among the users, wherein the plurality of user terminals and the server respectively have clock modules for keeping a time, the data updating method comprising the steps of:

synchronizing a time between the clock modules of a plurality of user terminals and the clock module of the server;

by the user terminal, attaching a time obtained from the clock module as a data update request issuance time to a shared data

update request when requesting a shared data update, and transmitting the shared data update request to the server, and repeatedly transmitting the shared data update request in keeping the data update request issuance time unchanged until the shared data update request is received at the server; and

by the server, receiving the shared data update request from the user terminal and deciding the updating order of the shared data based on an attached data update request issuance time attached to the shared data update request received,

wherein the shared data update request is one of a selling order and a buying order which includes a first condition and a quantity, wherein the shared data update request is stored in a memory unit of the server in a format of shared data update request queue in an order of the data update request issuance time,

wherein the data updating method comprises the steps of:

a) checking by executing one of the steps of (a1) to (a3), depending on a state of the shared data updating request queue stored in the memory unit of the server;

a1) completing the data updating process when neither the selling order nor the buying order is stored in the shared data update request queue stored in the memory unit of the server;

a2) taking the buying order as a main order and taking the

selling order as a dealing order when a top of the shared data update request queue stored in the memory unit of the server is the buying order, and advancing to a first condition comparing step (b); and

a3) taking the selling order as a main order and the buying order as a dealing order when a top of the shared data updating request queue stored in the memory unit of the server is the selling order, and advancing to the first condition comparing step (b); and

b) comparing the first condition by reading the dealing order in an order from the shared data updating request queue stored in the memory unit of the server, and executing one of the steps depending on an availability of a dealing order that matches in the first condition with the main order;

b1) if there is no matching in first condition, deleting the main order from the shared data update request queue as a non-established main order and returning to the checking step (a) ;

b2) if the first condition matches, comparing the buying quantity and the selling quantity, and executing one of the following steps based on a result of comparing;

b21) if the buying quantity is exceeding the selling quantity, non-establishing the buying order and the selling order,

and reading a next dealing order from the shared data update request queue, and returning to the first condition comparing step

b22) if the buying quantity is same with the selling quantity, establishing the buying order and the selling order, deleting the buying order and the selling order from the shared data update request queue, and returning to the checking step (a); and

b23) if the selling quantity exceeds the buying quantity, establishing the selling order and the buying order, deleting the buying order from the shared data update request queue, and replacing selling quantity to an exceeding buying quantity, updating and storing the queue data of the selling order, and returning to the checking step (a).